

## **AMENDMENTS TO THE CLAIMS**

**1. (Currently Amended)** A method for diagnosing an endometriosis-related disease~~which~~  
, said method comprises:

\_\_\_\_\_ (a) \_\_\_\_\_ measuring an expression level of histamine releasing factor (HRF) polynucleotide  
in a biological ~~sampled sample~~ sample from a subject; wherein said biological sample is endometriotic  
tissue or menstrual blood; and

\_\_\_\_\_ (b) \_\_\_\_\_ comparing the HRF polynucleotide expression level with that in a normal  
biological sample, ~~and judging wherein~~ a subject exhibiting a significantly higher HRF  
polynucleotide expression level when compared with the normal biological sample is indicative of  
as a patient subject having the endometriosis-related disease or ~~as a subject at a high risk thereof.~~

**2. (Withdrawn)** HRF oligonucleotide which hybridizes under a stringent condition with  
HRF polynucleotide.

**3. (Withdrawn)** An oligonucleotide probe, which is a labeled HRF oligonucleotide of  
claim 2.

**4. (Withdrawn)** A DNA microarray having as a target capture probe the HRF  
oligonucleotide of claim 2 or an HRF polynucleotide.

**5. (Withdrawn)** A primer set for PCR amplification of an HRF polynucleotide.

**6. (Currently Amended)** A method for diagnosing an endometriosis-related disease, said method comprising ~~at least the following steps~~:

- (a) ~~a step for~~ preparing RNA from a biological sample of a subject, wherein said biological sample is endometriotic tissue or menstrual blood;
- (b) ~~a step for~~ subjecting the RNA prepared in ~~the~~ step (a) to an electrophoretic separation;
- (c) ~~a step for~~ hybridizing the RNA prepared in ~~the~~ step (b) with ~~the~~ a labeled HRF oligonucleotide probe of claim 3 that hybridizes under a stringent condition with HRF polynucleotide;
- (d) ~~a step for~~ comparing the signal level of the labeled HRF oligonucleotide probe which ~~had been~~ hybridized with the RNA in ~~the~~ step (c) as an index of the HRF polynucleotide expression level with a result of a normal biological sample; and,
- (e) ~~a step for~~ using a significantly higher HRF polynucleotide expression level when compared with the normal biological sample as an index reflecting the degree of the endometriosis-related disease or ~~a~~ risk thereof.

**7. (Currently Amended)** A method for diagnosing an endometriosis-related disease, said method comprising ~~at least the following steps~~:

- (a) ~~a step for~~ preparing RNA from a biological sample of a subject, wherein said biological sample is endometriotic tissue or menstrual blood;
- (b) ~~a step for~~ preparing a labeled cDNA from the RNA prepared in ~~the~~ step (a);

(c) ~~a step for~~ contacting the labeled cDNA prepared in ~~the~~ step (b) with ~~the~~ a DNA microarray ~~of claim 4~~ having as a target capture probe an HRF polynucleotide or an HRF oligonucleotide that hybridizes under a stringent condition with HRF polynucleotide;

(d) ~~a step for~~ comparing the signal level of the labeled cDNA which ~~had been~~ hybridized with ~~a~~ the capture probe of the DNA microarray in ~~the~~ step (c) as an index of the HRF polynucleotide expression level with a result of a normal biological sample; and,

(e) ~~a step for~~ using a significantly higher HRF polynucleotide expression level when compared with the normal biological sample as a index reflecting the degree of the endometriosis-related disease or ~~a~~ risk thereof.

**8. (Currently Amended)** A method for diagnosing an endometriosis-related disease, said method comprising at least the following steps:

(a) ~~a step for~~ preparing RNA from a biological sample of a subject, wherein said biological sample is endometriotic tissue or menstrual blood;

(b) ~~a step for~~ synthesizing a cDNA using ~~the~~ a primer set ~~of claim 5 for~~ PCR amplification of an HRF polynucleotide with the RNA prepared in ~~the~~ step (a) as a template;

(c) ~~a step for~~ comparing the level of the cDNA prepared in ~~the~~ step (b) as a HRF polynucleotide expression index with a result of a normal biological sample; and,

(d) ~~a step for~~ using a significantly higher HRF polynucleotide expression level when compared with the normal biological sample as a index reflecting the degree of the endometriosis-related disease or ~~a~~ risk thereof.

**9. (Currently Amended)** A method for diagnosing an endometriosis-related disease comprising 2 or more diagnostic methods selected from the diagnostic methods according to claims 6, 7 ~~and or~~ 8.

**10. (Withdrawn)** A therapeutic agent for an endometriosis-related disease comprising a molecule which inhibits the expression of an intracellular HRF polynucleotide.

**11. (Withdrawn)** A method for treating an endometriosis-related disease comprising administering a molecule which inhibits the expression of an intracellular HRF polynucleotide.